

Reverse Shoulder Arthroplasty

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PHASE I (POST-OP DAY 1 – WEEK 3)

General Precautions and Guidelines:

- Sling 24/7 (may remove for grooming and home exercise program, 3-5x/day)
- Avoid combined IR/EXT/ADD (hand behind the back) and IR/ADD (reaching across chest) for dislocation precautions
- Pillow behind the upper arm while reclining with sling on
- Patient should always be able to see the elbow
- Avoid WBing – discuss WBing need with physician and PT
- No submersion in water until after 4 weeks. No lotion/oils/soap to incision.
- Ice after HEP as needed

Goals:

- Maintain integrity of joint replacement; protect soft tissue healing
- Control inflammatory process
- ROM for elevation to 130 and ER to 30
- Optimize distal UE circulation and muscle activity (elbow, wrist and hand)
- Instruct in use of sling for proper fit
- Educate regarding signs/symptoms of infection

ROM:

- 0 – 6 weeks: 0° – 130° flexion, 0-30° ER, no behind back motion.
 - IF for proximal humerus fracture, avoid flexion > 90 x 4 weeks

Brace:

- 0 – 3 weeks: Sling + pillow at all times. May remove for hygiene/exercises
Must sleep in brace
- 3 – 6 weeks: Brace for sleeping and in public/uncontrolled settings

Weightbearing Status:

- No weightbearing until 6 weeks

Therapeutic Exercises:

- Active elbow, wrist and hand
- Pendulum
- Scapular retraction with arms resting in neutral position
- Forward elevation in scapular plane to 130 deg max motion (table slides, step backs, supine well arm assisted)
- ER in scapular plane to 30 deg (seated or supine)
- ROM within precautionary range limits may be active or passive

Criteria to Advance:

- Pain less than 3/10 with ROM
- Healing incision without signs of infection
- Clearance by surgeon to advance after 2-week post op visit

PHASE II (POST-OP WEEKS 3-6)

General Precautions and Guidelines:

- **May** discontinue sling use at 3 weeks; after 5 weeks can remove the sling at home and just use the sling at night and in community for 6th week
- May use arm for basic activities of daily living (such as feeding, brushing teeth, dressing...)
- May submerge in water after 4 weeks
- Avoid combined IR/EXT/ADD (hand behind the back) and IR/ADD (reaching across chest) for dislocation precautions
- Avoid acromial or scapular spine pain as increase deltoid loading – decrease load if this occurs

Goals:

- Elevation to 130 degrees, ER to 30 degrees – passive, active assisted or active
- Low to no pain (< 3/10)
- Ability to fire all heads of deltoid

Brace:

3 – 6 weeks: Wean brace in controlled settings. Sleep in brace until 6 weeks. In uncontrolled/public settings, use brace until 6 weeks.

Weightbearing Status:

6-8 weeks: Begin weightbearing as tolerated

Therapeutic Exercises:

- May discontinue grip, and active elbow and wrist exercises since using the arm in ADLs with sling removed around the home
- Continue elevation to 130 and ER to 30, both in scapular plane
- Submaximal isometrics (pain-free effort) for all functional heads of deltoid (anterior, posterior, middle).
- Active exercise as able:
 - Supine forward punch
 - Place in balanced position with circumduction and progressive arcs in sagittal plane
 - Side-lying abduction to 90
 - Lateral raise with bent elbow
 - Prone extension to hip

Criteria to Advance:

- Elevation in scapular plane to 130; ER in scapular plane to 30
- Ability to fire isometrically all heads of the deltoid muscle without pain
- Ability to place and hold the arm in balanced position (90 deg elevation in supine)

PHASE III (POST-OP WEEKS 6-12)

General Guidelines and Precautions:

- Avoid forceful end-range motion in any direction
- Progressive active use of arm in activities of daily living without being restricted to on by the side of the body
- No heavy lifting or carrying
- Initiate functional IR behind the back gently without forceful over pressure

- Avoid acromial or scapular spine pain as increase deltoid boating – decrease load if this occurs
- NO UPPER BODY ERGOMETER

Goals:

- Optimize ROM for elevation and ER in scapular plane
- Expected PROM: Elevation to 145-160, ER 40-50, functional IR to L1
- Recover AROM to approach as close to PROM available as possible
- Established any instability of the shoulder

Therapeutic Exercises:

- Forward elevation in scapular plane active progression: supine to incline to vertical; short to long lever arm
- Lateral raise with bent elbow; side-lying abduction
- Active ER/IR with arm at side
- Scapular retraction with light band resistance
- Serratus anterior punches and supine; avoid wall, incline or prone press ups for serratus anterior
- Functional IR with hand sides up back – gentle and gradual

Criteria to Advance:

- AROM equals/approaches PROM with good mechanics for elevation
- No pain
- Higher level demand on shoulder then ADLs functions

PHASE IV (12 WEEKS+)

General Guidelines and Precautions:

- No heavy lifting or overhead sports
- Weight lifting limit 25 lbs
- No heavy pushing activity
- Gradually increase strength
- No upper body ergometer

Goals:

- Optimize functional use of operative upper extremity to patient's specific goals
- Gradual increase in deltoid scapulae muscle and rotator cuff strength
- Pain-free functional activities

Therapeutic Exercises:

- Light hand weights for deltoid up to and not exceed 3 lb for anterior and posterior with long arm against gravity; elbow bent to 90° for abduction in scapular plane
- Band progression for extension to hip with scapular depression/retraction
- Band progression for serratus anterior punches in supine; avoid wall, and climb or her own press ups for serratus anterior
- End range stretching gently without forcefully over pressure in all planes (elevation in scapular plane, ER in scapular plane, function IR) with stretching done for life as part of daily routine
- No upper body ergometer

Criteria to Advance:

- Pain-free AROM for shoulder elevation (except around 135-150 degrees)
- Functional strength for all ADLs, work tasks, and hobbies approved by surgeon
- Independence with home maintenance